SWB's OSSs. To date, almost 3,400 individual CLEC users have been authorized to access this facility.

- SWBT has established a number of support organizations specifically designed to serve the CLECs. These support organizations include the Local Service Center ("LSC"), Local Operations Center ("LOC") and Help Desk. The LSC serves as the single point of contact for CLECs for pre-ordering, ordering/provisioning, and billing and collection. The LOC serves as the single point of contact for CLECs for maintenance and repair twenty-four (24) hours per day, seven (7) days per week. The Help Desk provides CLECs assistance and problem resolution for systems and applications made available to CLECs.
- SWBT has provided "live" demonstrations to CLECs of SWBT's OSSs. To date, over 50 CLECs have participated in the OSS demonstrations. In addition, SWBT has established two 90-day free trial offers for CLECs to evaluate and utilize SWBT's electronic interfaces.
- SWBT has developed and conducted formal classroom training for CLECs that opt to utilize its electronic interfaces. To date, 28 CLECs and over 300 of their employees have attended these sessions intended to train the CLEC staffs.
- SWBT has provided CLECs detailed documentation, specifications, and business rules as applicable for the SWBT electronic interfaces made available to them.
- SWBT has conducted tests to ensure that these interfaces meet the expected CLEC volumes. An independent third party has confirmed that SWBT's electronic interfaces can handle forecasted CLEC volumes.
- SWBT has developed OSS performance measures that demonstrate non-

discriminatory access between its retail operations and the interfaces made available for CLEC use.

- SWBT is providing aggregate empirical data, where available, of CLEC use of SWBT's OSSs on a per interface basis. Where CLECs are not using an interface, SWBT demonstrates that it has done everything within its control to encourage and facilitate use of its interfaces by CLECs.
- SWBT has 87 CLEC interconnection agreements in its five-state region with OSS functionality defined and priced. Of that total, 67 of them are for different CLECs.

Attachment C, "SBC's Success In Opening Its Local Markets: Significant Local Competition Exists And Is Growing," provides detailed statistics and volumes of CLEC service requests processed through SBC's centers and OSSs.

B. SBC's Provision Of UNEs Affords New Entrants All They Need And In Fact Exceeds Current Legal Requirements.

LCI complains that BOCs are refusing to combine UNEs for new entrants when desired, and that they are announcing their plans to "uncombine" existing combined UNEs to the detriment of their competitors.[25] Again, SBC is not in a position to speak for other BOCs. However, despite the fact that SBC is not legally obligated to do so,[26] it has stated its intention to perform a service, under appropriate terms and conditions, that essentially combines UNEs for CLECs.

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[25] Id. at pp. 7-8.

[26] See Iowa Utilities Board v. FCC, 120 F.3d 753, 813 (8th Cir. 1997) ("Iowa Utilities Board").

Furthermore, SBC has not stated any general intent to "uncombine" currently combined UNEs, except to the extent required to prevent discrimination against other CLECs that do want UNEs "uncombined." SBC recognizes its general responsibility to provide all UNEs on a fully unbundled basis.[27] Apparently, LCI believes that this legal responsibility is so malleable as to be reversible in any given case, depending upon the particular needs of any one CLEC in any such case. SBC does not believe that was the intent of Congress, as the 8th Circuit decision in Iowa Utilities Board has confirmed.

In any event, as shown conclusively by Attachment C, SBC has been providing UNEs as needed by new entrants -- otherwise, there certainly would not be such convincing evidence of their viability within SBC's operating territories.[28]

C. LCI's Proposal Is Unnecessary Regarding SBC Pricing Of Services And Functions Required By The Act.

As demonstrated by Attachment C, SBC's prices for the various services and functions required for new entrants under the 1996 Act are reasonable and fair, or SBC most assuredly would not have experienced the increased level of local competition that it has seen in just the last two years. LCI's repeated complaints about supposedly prevalent disagreement among ILECs and CLECs over such things as pricing are simply not borne out by the facts as far as SBC is concerned. State commissions have already approved over 210 SBC interconnection and resale agreements. As of January 1998, more than 160 CLECs were operational within SBC's territories, and SBC had lost over 600,000 access lines to CLECs either through resale or the establishment of new, facilities-based service.

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[27] Id.

[28] See Attachment C, "SBC's Success In Opening Its Local Markets: Significant Local Competition Exists And Is Growing," pp. 4-5 and pertinent charts.

More than 47,000 numbers have been ported via interim number portability by SBC for CLEC use. SBC's OSSs processed over 1.2 million CLEC service orders during 1997 alone. Furthermore, these numbers grew steadily and dramatically during 1997.

Such statistics plainly show that parties truly wishing to enter the local exchange business in SBC's territories are in fact quite able to do so. The fact that a number of issues remain to be settled with some CLECs in pending state arbitration cases, or in appeals of such cases, simply does not mean that entry is infeasible in SBC territory. To the contrary, this means only that some parties are more interested in tying BOCs up in litigation to keep them from interLATA relief than they are in entering the local exchange service business. In any event, it ought to be beyond debate by now that the FCC has no jurisdiction over prices for ILEC services and functions required by the 1996 Act, whether exercised directly or indirectly.[29]

V. ALTHOUGH LCI CHARACTERIZES ITS PROPOSAL AS "OPTIONAL," ADOPTING IT WOULD EXCEED THE COMMISSION'S JURISDICITON.

A. LCI's Proposal Would Become A De Facto Requirement For InterLATA Relief, Thus Violating Express Terms Of The Act.

Although several BOC applications for interLATA relief under Section 271 have been filed with the Commission, none have been approved to date. Indeed, the Commission has yet to issue a definitive ruling as to exactly what is required for Commission approval. The Commission's rejection orders have identified some specific shortcomings, but they also speak in general terms about other things found lacking in the

[29] Iowa Utilities Board v. FCC, Order on Motions for Enforcement of the Mandate, No. 96-3321 et al. (8th Cir. January 22, 1998).

BOCs' applications, or say nothing because they do not reach the area (e.g., the public interest finding required by Section 271(d)(3)(C)).

Considering these facts it would certainly be possible, if not probable, that if a proposal like LCI's were adopted as an "optional" route to 271 relief for BOCs, that route would quickly become the only open road to this destination as a practical matter. The bar would be raised, and all BOC 271 applications thereafter that did not conform to LCI's invasive corporate restructuring manifesto would be viewed as fatally lacking by comparison. Indeed, theoretically, the Commission would never have to grant a 271 application except those accompanied by LCI's structural straightjacket, if it so desired.

If LCI's corporate restructuring scheme became a de facto requirement for interLATA relief, that would violate the express terms of the Act. Section 271(d)(4) makes crystal clear that the Commission "may not, by rule or otherwise, limit or extend the terms used in the competitive checklist set forth in subsection (c)(2)(B)."[30] The Section 271(c)(2)(B) checklist of course says nothing about the corporate structure of BOCs applying for interLATA relief pursuant to Section 271. Even the section of the statute that deals with the degree of separation required between a BOC and its interLATA affiliate goes nowhere near as far as LCI now urges the Commission to go in that direction, on this supposedly "optional" basis.[31] By adopting a common practice of rejecting any 271 application not accompanied by LCI's proposed radical corporate restructuring, even though the Commission would not have adopted any express "rule" expanding the statute's competitive checklist, it would have "otherwise" effectively

[30] 47 U.S.C. Section 271(d)(4) (emphasis added).
[31] See 47 U.S.C. Sections 272(b)-(e).

expanded the checklist, in violation of the statute and Congressional intent.

B. Even If The Proposal Did Not Become A De Facto Requirement, Adopting It Would Exceed The Commission's Jurisdiction.

In crafting the 1996 Act, Congress took great pains to spell out precisely the burden to be met by BOCs wishing to obtain interLATA authority. Many options were raised and debated, including those which involved various "presumptions" to be applied to the evidence before the Commission, which party(ies) had the burden of proof and when, and other such judicial devices employed within various areas of the law.[32] However, Congress settled upon no such presumptions, burden shifts, or similar decision-making tools, choosing instead to specify a detailed list of things a BOC must prove it has done under the normal standard of review by the Commission. Therefore, were the Commission now to adopt even an "optional" path for BOC 271 relief incorporating a different standard of review resulting from the LCI "rebuttable presumption," it would be violating the intent of Congress as clearly evidenced by the legislative history.[33]

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[32] E.g., see Senate Report on S.652 (Report No. 104-230), 104th Congress, 1st Session, March 30, 1995, p. 44 ("the FCC's determination of whether the provision of the requested interLATA service is consistent with the public interest . . . must be based on substantial evidence on the record as a whole," contrasted with the statutory language as enacted which states simply: "The Commission shall state the basis for its approval or denial of the application" 47 U.S.C. Section 271(d)(3)).

[33] Moreover, it is not at all clear how valuable LCI's rebuttable presumption would be to the BOCs. LCI states that the "RBOC also must actually be providing or generally offering each checklist item in order to meet Section 271" (n. 30), which of course is already a clear statutory requirement. Apparently, then, the rebuttable presumption only has to do with the Commission's public interest determination, and even then it is, after all, rebuttable. Thus, on so subjective a finding as the "public interest," LCI is offering a presumption that any other party could "rebut" on whatever basis squared with the Commission's then current view in any given case.

Furthermore, even on a truly "optional" basis, for the Commission to pry into such matters as specific overall corporate structure,[34] percentage of public ownership of specific affiliates,[35] and even the nature of employees' compensation, bonuses and stock options,[36] would far exceed any power the Commission even arguably has under any part of the Telecommunications Act. To purport to regulate such matters, even under a scheme labeled as "optional" for the carrier, would stretch the Commission's statutory authority far beyond all tolerable limits.

Finally, in any event, most of the areas covered by LCI's proposal that would properly be subjected to regulation (e.g., all costing and pricing issues) are within the exclusive jurisdiction of the state commissions.[37] Thus, even if this Commission wished to implement LCI's plan it could not do so solely via its own authority. LCI does not even attempt to address this practical flaw in its concept.

VI. LCI'S "SEVEN MINIMUMS" ARE IN FACT SEVEN MANACLES WHICH WOULD UNLAWFULLY HANDCUFF NEARLY ALL BOC COMPETITIVE ENDEAVORS.

A. The Corporate Structure

LCI presumes that the entirely separate wholesale/retail structure envisioned for BOCs would produce only benefits for all concerned. Such is simply not the case.

First, from a credit perspective, the cost of debt would rise for both HoldCo and ServeCo as the creditors, separated as well by the structure, would lose the benefit of a

[34] LCI Petition at pp. 17-20.
[35] Id. at p. 30.
[36] Id.
[37] See Iowa Utilities Board, 120 F.3d at 794-796.

diverse set of sources of debt service. Creditors would require a higher return for the higher, less diversified risk. The net effect would be higher costs for both entities and therefore, higher costs for both wholesale and retail customers.

The operation would also have greater dead weight cost associated with the forced duplication of administrative functions currently shared by the network and retail side of the business. This would include separate investor relations, legal, finance, regulatory and other departments, as well as the cost of separate boards and other administrative costs. The high costs of such operational inefficiencies would of course have to be passed on to consumers, to their detriment.

The full costs, to both BOCs and consumers, of such a forced BOC corporate structure, are detailed within the following subsections.

B. The Role Of The "NetCo"

LCI's suggestion that a BOC's NetCo would have to price all of its wholesale services based on TELRIC costs gives rise to two major concerns. First, the NetCo would have no incentive to develop new network capabilities because all it could recover would be TELRIC costs. Second, the margins in the wholesale network market would be so small that few, if any, other companies would risk capital to build a competitive network, contrary to the clear intent of the Act.[38] The result would be a single facilities-based network/OSS system operated by the NetCo, and used by virtually all retail providers who would thus have limited ways to differentiate themselves competitively.

[38] See 47 U.S.C. Section 271(c)(1)(A).

That would constrain customer choice and would act to impede, not foster, local telecommunications competition.

C. The Role Of The "ServeCo"

LCI proposes that the BOCs' entire retail operations be largely divested, to re-enter the heatedly competitive communications industry with zero assets and zero market share through separated affiliates ("ServeCos)." LCI urges that such ServeCos be required to be at least 40 percent publicly owned.[39]

ServeCo investors would be in a minority investment position, with the majority held by the holding company. Because of their limited control, these investors would demand a premium return on investment, therefore raising the cost of equity to ServeCo, resulting in higher retail prices. ServeCo would thus suffer an important competitive disadvantage not shared by its rivals, solely due to the artificial devise of a de facto requirement of 40 percent public ownership. Again, consumers would bear the negative impact of increased ServeCo prices.

D. Nondiscrimination (a/k/a "Deny BOCs All Internal Efficiencies")

Under the noble banner of "nondiscrimination," LCI leads a destructive charge against its BOC competitors, inviting the Commission to support its attack. The Commission would be prudent to decline. LCI is simply attempting to effectively reimpose certain specific obligations upon BOCs which a Court has already clearly found to be in excess of the Commission's statutory authority.

[39] LCI Petition at p. 17.

For example, LCI urges the Commission -- for the sake of "nondiscrimination" -- to reinstitute its Local Competition Order version of a "pick and choose" rule,[40] recognizing that this very rule has already been struck down by a Court.[41] Apparently LCI wishes the Commission to conclude that, merely because its proposal would be labeled "optional," the Commission would be free to reassert as part of that option all earlier interpretations of the 1996 Act that the Court has plainly invalidated. LCI also urges the Commission to require TELRIC costs for NetCo services. Since the Court has already made very clear that it will not countenance Commission attempts to do indirectly what the Court has squarely ruled it cannot do directly,[42] the Commission should summarily reject LCI's pleas that it do so yet another time.

Further, by splitting the BOCs into wholesale and retail entities, the Commission would deprive the public of the "economies of scope"[43] derived from an integrated local exchange company. Resources, which previously could be shared between the wholesale and retail operations of the BOC (e.g., administration, information systems, customer service, etc.), could not be used to lower overall costs if the LCI proposal were adopted. By severing the natural link between wholesale and retail services, many of the benefits already enjoyed by consumers would be eliminated.

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[40] Id. at p. 21.

[41] Id. at n. 27; and see Iowa Utilities Board, 120 F.3d at 800-801.

[42] See supra, n. 6.

[43] Economies of scope occur when a firm is able to generate efficiencies from producing several products. For example, in the two-product case, economies of scope would exist if, for given amounts of the two products, it is cheaper for one firm to produce the products than it is for two different single-product firms to produce the products separately. In other words, the joint costs of production are less than the stand-alone costs of production when economies of scope exist. John C. Panzar, Technological Determinants of Firm and Industry Structure, *in* 1 HANDBOOK OF INDUSTRIAL ORGANIZATION 3 (Richard Schmalensee & Robert D. Willig eds., 1989).

Besides these immediate costs to consumers, the LCI plan would also raise prices as the telecommunications market further developed. Since the integrated BOCs would be prohibited from participating in the long distance market, customers would be deprived of the many benefits that would occur with BOC entry into interstate toll. In addition to already having significant resources in place to compete in the long distance market, the BOCs also have high name recognition with consumers. BOCs have the ability to bring an increased state of competition to the interLATA market swiftly. Also, because of their unique position in the market, the BOCs will be in a strong position to offer lower toll prices to residential customers. The FCC has even noted that the ability of the IXCs to price services at quasi-collusive levels to residential consumers will be reduced by allowing for competitive entry in the interstate interexchange market by the facilities-based BOCs.[44] The BOCs will have this ability due to the scope economies of offering services using many of the same facilities that they have in place for their current products. LCI's proposal on the other hand, under the guise of promoting "nondiscrimination," would in fact merely deprive consumers of the benefits of efficient BOC competitors.

[44] Notice of Proposed Rulemaking, In the Matter of Policy and Rules Concerning the Interstate, Interexchange Marketplace Implementation of Section 254(g) of the Communications Act of 1934, as amended, CC Docket No. 96-61, Federal Communications Commission, 11 FCC Rcd 7141; 1996 FCC Lexis 1472, FCC 96-123, Adopted: March 21, 1996, Released: March 25, 1996, par. 81.

E. Balloting and Allocation

LCI places a great deal of importance upon the ballot and allocation part of its plan, without justification. Balloting is disruptive for customers and not reflective of customer desires. If one examines the history of long distance deregulation, balloting was not a success from the customers' perspective in that changes were imposed on customers who did not respond to the ballot. Where the industry currently has intraLATA toll competition, there is no balloting procedure. Customer demand and proactive selection drive customer choice, as it should be.

Throughout its proposal, LCI attempts to weave a competitive theme. LCI then goes on to suggest shackling BOC ServeCos with unreasonable organizational requirements and other constraints that would make it impossible to compete, resulting in absolutely no benefit to consumers. Finally, LCI makes a shallow pitch for dividing up customers -- via a ballot and allocation process -- that have not been marketed away from Netco by competitors.

However, LCI makes no recommendations as to how this balloting and allocation process would take place. Carrier of last resort and universal service issues are never addressed, but are major public interest issues. LCI's approach seems to be to argue competition, punish and handcuff the BOCs, make it impossible for ServeCos to compete effectively, then ballot and allocate remaining customers via a minimally competitive process, while causing significant confusion for consumers generally. It is difficult to understand how this would benefit anyone but new entrants into the local market.

F. Regulation Of The Companies

In addition, the LCI proposal would do little to reduce the regulatory burden now imposed upon the LECs. The new wholesale entity would still be subject to the tariff process following the adoption of this plan. Interstate price cap rules would remain in place while state regulation would continue for intrastate access. Consumers would be further harmed because the network provider would be prohibited from offering volume discounts to all purchasers of wholesale service.[45]

G. Universal Service Support

LCI glosses over Universal Service implications of its proposal as though they are of no major consequence. However, it is obvious that under its scheme the Universal Service challenge would be immense. How much would NetCos draw from the fund during the "transition" period and how would that be determined? How would the FCC determine how much ServeCos and CLECs would receive during this transitional period? How would the FCC ever determine whether CLECs should draw from the fund, in the case of those companies that chose to solicit only the high user, high profit residence consumers? Once a NetCo was left with only the low use/low profit residence consumers, and the balance of those customers had been allocated among all ServeCos and CLECs, how would NetCos' stranded investment be recovered and how would such recovery affect Universal Service?

Too many questions are left unanswered by LCI's proposal in this absolutely critical area.

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[45] LCI Petition at p. 23.

H. LCI's "Bear Trap" Clause Would Preclude BOCs From Employing Any Flexibility In An Ever-Changing Competitive Industry.

Of all the unreasonable, biased suggestions contained in LCI's Petition, perhaps none is more indefensible than its proposal that, once a BOC's holding company had opted for the LCI structural arrangement for purposes of obtaining interLATA relief, it could never, except under the most implausible circumstances, opt out of that arrangement.[46] That option would only be available where "actual, market-disciplining facilities competition exist[ed] throughout the RBOC's region."[47] No one could seriously suggest that there will ever be complete overlay competitive networks existing throughout any BOC's entire region. Thus, if this type of totally inflexible "Bear Trap" clause ever manifested itself in the form of a Commission rule, the rule would of necessity be arbitrary and capricious under the Administrative Procedures Act, by its very nature. SBC only mentions this aspect of LCI's proposal to expose the effort for what it really is: one competitor's ultimate wish list of hindrances designed especially for some of its chief rivals.

[46] Id. at p. 24.
[47] Id. (emphasis added).

VI. CONCLUSION

SBC has shown herein that LCI's so-called "Fast Track" proposal would produce no benefits for consumers and, in fact, would harm them significantly. The proposal is also unnecessary and unlawful. The Commission would be wise to reject it.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, Kathy Moody, hereby certify that the "Comments of SBC Communications, Inc." have been served on March 23, 1998, to the Parties of Record.

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LOCAL EXCHANGE COMPETITION
UNDER THE 1996 TELECOM ACT

Red-Lining The Local Residential Customer

NOVEMBER 4, 1997

LOCAL EXCHANGE COMPETITION UNDER THE 1996 TELECOM ACT

Red-Lining The Local Residential Customer

SUMMARY

In February 1996, Congress passed, and President Clinton signed into law, a sweeping reform of U.S. telecommunications regulation. The Telecommunications Act of 1996 was intended to open entry to new competition in every segment of the industry: long-distance and local, wireline and wireless, copper and cable, service and equipment. The Act is now over a year and a half old.

How well has competition evolved so far? In local markets, competition has developed rapidly – but only where competition makes strategic and economic sense for the new entrants. It makes sense in the business markets of larger cities. In residential markets, competitors are selling and reselling measured service (often at steep per-minute rates), local toll service, heavily bundled services, and even some basic flat-rate service in some states. But these competitors only build facilities out to business customers. WorldCom, the local competitor most in the news recently, has made red-lining the centerpiece of its competitive strategy. John Sidgmore, WorldCom's Vice Chairman, has said that "[f]rom the very start, we've been focused on the business market rather than the consumer market, and I think that has really set us apart."

Local Competition

In local markets, competition has developed rapidly – wherever competition makes strategic and economic sense for the new entrants. That competitive sphere includes business services of all kinds: short-haul toll services, mobile services, many data services, and other enhanced services.

- The primary objective of the 1996 Act was to open all telecom markets to competition. As of November 1997, over 280 companies were providing competitive local exchange carrier service of some description – companies like WorldCom and TCG, cable companies, interexchange carriers, providers of personal communications services, providers of shared tenant services, and others.

- Interconnection regulation, Congress recognized, can greatly accelerate the development of competition and efficient collaboration in networked industries. Over 1,500 interconnection agreements had been reached by November 1997.

- In SBC's seven-state region, competitors are serving over 300,000 lines via resale. Likewise, in BellSouth's region, competitors are serving 130,000 such lines. Even in South Carolina, a BellSouth state in which competitors have generally shown very little interest, competitors are reselling nearly 4,000 lines.

- Capital investment in competitive local exchange facilities is rising fast. Counting AT&T, MCI, and Sprint among them, the companies currently competing in local exchange markets invested $2 billion less than the Bell Companies in 1993. By 1997, capital investment by that same group had surpassed Bell Company investment by about $4 billion.

- Competitive local carriers installed over 500 new switches in 1996, and another 270 in the first half of 1997 – far more new switches than were deployed by Bell Companies.

- Until recently, Bell Companies were by far the largest buyers of fiber-optic cable, even with AT&T and MCI included on the other side of the comparison. Current indications are that other buyers of fiber will outstrip the Bell Companies within the decade, if they have not done so already.

- Data traffic is growing much faster than voice and will soon surpass it, if it has not already done so. Since passage of the 1996 Act, cable operators have begun offering data services to a rapidly growing number of customers in this high-growth segment of the market. A projected 80 percent of homes passed by cable lines will be able to access the Internet over cable by 2002, and a quarter of them are expected to subscribe. By that estimate, one third of all Internet users will be accessing the Internet over cable networks.

- By November 1997, providers of wireless PCS had concluded negotiations and signed 157 interconnection agreements with incumbent wireline carriers. Since passage of the 1996 Act, PCS providers have launched commercial service in markets that serve half of the U.S. population. Wireless prices are falling.

A study commissioned by AT&T and MCI before passage of the 1996 Act concluded that natural economic forces would prevent cable and wireless operators from having any significant competitive impact on local markets in the foreseeable future. But judged against the historical record in other markets, the competitive record in local markets since 1996 is excellent. Far more has happened in local markets during twenty months of private interconnection negotiation than happened in other markets during years of interconnection regulation minutely orchestrated by federal regulators.

Competition at the High End of the Market

Local phone companies spend an average of $27 to $37 per month to provide a local phone line and dial tone for normal levels of local calling. The average business subscriber pays a monthly fee for a basic line, dial tone, and subscriber line charge that aligns fairly closely with that average cost. The average residential subscriber, by contrast, pays a basic fee of about $17 – typically 50 to 80 percent lower than business rates. Incumbent local phone companies make up the shortfall on fees charged to provide interexchange access (which generate average net

monthly revenue of $3-$4 per line), local toll charges (net monthly revenue of $3 per line), vertical services like call waiting and Caller ID (another $4 per line), and business services generally.

These numbers reflect a deliberate regulatory policy to maintain affordable service and promote universal connection. In most markets, subsidies of any kind are inefficient, but their effect on efficiency in networked industries is less clear. The value of the telephone network is enhanced each time a customer is added to the network – every new connection creates a positive "network externality." All other subscribers benefit from every new subscriber added to the network. There are thus strong social and political reasons to maintain affordable residential rates, and legitimate economic and efficiency arguments too.

Price regulation of local residential service does, however, clearly affect the trajectory of competition. Lowering prices on one side of the local market channels competitive investment toward the other, at least initially. Any company with money to invest in a new network will surely build out to business customers who currently pay $30 a month for measured service before it builds out to residential customers who currently pay a flat-rate $17 for unlimited service.

This is precisely what has happened so far, in the twenty months since the 1996 Act opened local markets to competition. In residential markets, competitors are selling and reselling measured service (often at steep per-minute rates), local toll service, heavily bundled services, and in some states, basic flat-rate service. When it comes to building networks, however, they build out to business customers alone. Competitors thread competitive fiber-optic networks through areas of high daytime population – business areas – while bypassing areas with low daytime population.

WorldCom, which recently announced a $30 billion stock bid for MCI, has been an explicit and unapologetic leader in implementing a red-lining strategy of this kind. WorldCom's existing long-distance, local, and Internet operations serve business customers almost exclusively. The company has repeatedly stated that residential service plays no part in its business plans. The proposed acquisition of MCI generally fits with this established strategy. On the long distance side, WorldCom has suggested that it might sell or shed MCI's current base of 20 million residential customers, keeping only MCI's three million business customers. MCI's local networks, particularly MCImetro, run almost exclusively to business customers. And WorldCom's local arm, MFS, has no plans at all to build out to residential customers. According to the company's chairman Bernard Ebbers, "[n]ot AT&T, not MFS or anyone else, is going to build local telephone facilities to residential customers. Nobody ever will, in my opinion."

Competitive Opportunities and Regulatory Impediments

That some elements of basic, residential, local service are priced below cost complicates the competitive picture, but it should not, standing alone, make competition impossible. The

typical customer buys enough additional local toll and vertical services to remain an economically attractive competitive target, absent other obstacles to entry. And the typical customer strongly prefers to buy the entire bundle from a single vendor, if (s)he can. Vendors recognize that bundling lowers their marketing costs, raises customer loyalty, reduces churn levels, and increases overall usage – in business and residential markets alike. In some markets, at least, MCI, AT&T, Sprint, and WorldCom, among others, are already assembling bundles of service to accommodate customer demand.

Competitors are legally free today to sell complete bundles of local, long-distance, and other telecom services, and – regulation aside – have compelling business reasons and opportunities to do so. As soon as one vendor begins offering fully bundled local and long-distance service in any major market, other vendors will immediately follow. They will have no choice. Customers will buy bundles, rather than bits and pieces of service, if they can.

There remains, however, one final – and decisive – obstacle to local competition in residential markets. Bell Companies remain formidable potential competitors in all telecom markets in which they do not already compete. The regulatory artifact is equally well understood, at least within the industry itself. Bell Companies are not currently permitted to compete in the highly profitable long-distance toll markets. That first handicap creates a second one: Bell Companies are also hobbled in competing for most lucrative business customers even in local markets, because all customers prefer to buy complete service packages, not bits and pieces. Finally, the FCC has made clear that AT&T, MCI, and other potential competitors can keep Bell Companies caged by not competing in local residential markets.

Every actual or potential rival of the Bell Companies benefits from this perverse regulatory policy. Incumbent long-distance providers clearly benefit, AT&T and MCI most strongly among them. These two companies completely dominate residential long-distance markets, and residential service generates the bulk of their interexchange profits. Other competitors with no interest in residential markets, or no long-distance networks of their own, have equally strong incentives to help preserve the Bell Company quarantine. The most profitable opportunity for these competitors is to sell bundled services to business customers, and they accommodate customer demand by doing so. Preventing Bell Companies from offering comparable bundles is very much to their advantage.

Every potential competitor in local residential markets will assess the opportunities for competition not only on its economic merits, but also on its regulatory de-merit – the risk that competition will end up letting the Bell Companies compete too. In most local markets today, the potential profit from capturing some share of residential markets – profits that are depressed from the outset by an array of subsidies and below-cost prices – is plainly outweighed by the potential losses that new Bell Company competition would then entail.

Few casual observers, however, are prepared to accept that local markets are competitive when the populist consumer – the residential subscriber – can still buy the populist service – basic, local, voice – from only a single provider. When will there be a second?

In some of the largest states, a second and more are up and running today. In California and New York, for example, regulators have chosen to set residential prices at levels fairly close to business rates, and that has helped tip the competitive calculus in favor of entry. But in most other states, the best competitive strategy is to keep the incumbent caged. The way to do that, so far at least, is not to compete in local residential markets at all.

In these circumstances, the only way to get competition started is to simply let the bundling begin. Of course, local phone companies will try to bundle first, if they can: they have much to gain by doing so, and nothing to lose. But insisting that they start second only guarantees that no bundling – and therefore no competition in residential markets – will start at all. Only by allowing local phone companies to go first will regulators impel others to beat them to it. AT&T, MCI, and other long-distance carriers have no incentive at all to be first. But they do have a strong incentive not to be second or third. The moment it becomes clear that a first is coming, one way or another, long-distance carriers will take steps to make sure they are not left far behind. They may not build out their own networks immediately, but they will certainly begin packaging what they already sell with local loop and dial tone supplied to them by local carriers at discount rates.

The few parts of the country that have seen relaxed regulation of local and other markets have realized tremendous benefits from them.

Connecticut would hardly appear to be the nation-leading target for competition: much of the southern part of the state is a residential suburb of New York City, and Connecticut's residential rates are well below business rates. Hartford, the state's main business center, ranks only 143rd in population nationwide. Nevertheless, Connecticut was one of the first states targeted by major carriers for local competition. AT&T began offering residential service in Connecticut only a few months after it entered California. MCI included Hartford on its short list of initial targets for local entry. TCI chose Hartford and surrounding suburbs as its first U.S. locality in which to offer advanced digital telephone, cable, and Internet access services, and invested heavily in its Hartford network during a period when the company virtually froze investment everywhere else. Over 20 other cable, wireless, and fiber-optic competitors have been certified to offer local exchange service in the state. TCI has invested $300 million on a new digital network in the state. MCI and several other competitors are pouring money into other networks. The incumbent local carrier is responding with $4.5 billion of new investment in higher bandwidth, long-distance service, and video.

All of this competitive activity can be traced to the competitive initiatives of Connecticut's incumbent local phone company, Southern New England Telephone (SNET).

Connecticut is the only state in the continental United States whose phone company is permitted to offer bundles of service to residential customers. SNET began offering a complete bundle of local and long-distance services to Connecticut customers in April 1994. SNET immediately undercut AT&T's prices by an average of 18 percent; by February 1997, SNET was providing long-distance service to about 35 percent of access lines in the state.

Unable to block SNET in the regulatory arena, AT&T, MCI, TCI, and other companies simply had to respond in the marketplace, and that is exactly what they did. Both AT&T and MCI even sought FCC permission to cut their interstate toll rates in Connecticut alone, to respond to "the rapidly emerging competition from SNET." When permission was denied, they started offering extremely low in-state toll rates instead. Connecticut consumers thus benefited from the early arrival of local competition. And they benefited even more from heightened competition in long-distance markets. Households that sign up for SNET's cut-rate service save about $7 per month. By comparison, their residential local service averages about $18 per month. The competitive gains in both residential and long-distance markets resulted from a single regulatory policy: Let competitors compete.

Local residential competition in the United Kingdom has flourished under a very similar regulatory regime. The U.K. has over 20 facilities-based competitors offering local service at prices equal to, or in most cases below, British Telecom's rates. SBC, U S West, and other Bell Companies have formed business alliances with U.K. cable companies and other competitors. Nearly 40 percent of U.K. households now have the option to purchase cable telephony. All of this has occurred under a regulatory regime very much less interventionist than our own. As competition has developed, British regulators have deregulated further still.

The Connecticut and U.K. experiences confirm that the important challenge for policy makers is not how to promote competition to provide the single component of residential service that is already ubiquitous and artificially cheap. It is to promote competition in the entire bundle of services that residential consumers buy. Over the longer term, the objective must be to promote new investment in advanced services, and to make sure that the investment is not channeled only to the many profitable peaks of the market, and away from the one unprofitable valley.

Promoting New Investment in Broadband Services

The benefits to be gained from new investment in local infrastructure have never been greater. The Internet is the most important development in mass communications of our times. It is a major driver of economic growth in the United States and around the globe. Demand for bandwidth is rising rapidly, doubling every 3½ months. Key components of the supply chain are not keeping pace, however. The supply of Internet bandwidth is lagging seriously, especially for residential subscribers. The reasons are again rooted in regulatory policies that block entry by the companies most able to meet the surging demand, and with the strongest incentives to do so.

Contrary to many popular perceptions, the worst problems of blocking and slow speeds in

the Internet today are centered not in the local exchange but in the networks among the ISPs and backbone carriers. On average, users cannot download across the backbone networks faster than about 40 kilobits per second, considerably slower than the high-bandwidth local access technologies currently being deployed allow.

At the level of the Internet backbone, AT&T and MCI show little promise as architects of the network of the future. AT&T and all other long-distance carriers who derive most of their current revenues from voice must recognize that growth of the Internet threatens their profits almost as much as Bell Company entry into long-distance markets. By doing little to add to Internet infrastructure, incumbent long-distance carriers have left the field largely to a single ambitious upstart that is buying up large parts of the infrastructure already in place.

In these circumstances, Bell Companies clearly should be playing integral roles in supplying new Internet bandwidth, not only for local access, but up through the highest tiers of the network as well. The Bell Companies certainly have the right incentives to invest in this market, because the growth of the Internet helps them to sell additional telephone lines and new local bandwidth through services like ISDN. Unlike the incumbent long-distance companies, local phone companies have much to gain by migrating customers, residential customers in particular, off subsidized, flat-rate analog lines and onto high-capacity, properly priced, digital lines. But most of the local telephone companies (aside from GTE) are legally barred from providing Internet backbone services. The current regulations that apply to Internet services discourage only one class of provider – the Bell Companies.

A second cluster of regulatory policies is creating equally strong disincentives to new investment in local Internet access facilities. Under the 1996 Act, Bell Companies are now required to "unbundle" and sell to their competitors whatever new capabilities and services they add to their networks, at rates determined by regulators, not market forces. On new, risky investment in facilities and services that turn out to be very popular, Bell Companies can therefore hope to recover only their original costs. New, risky investments that fail, by contrast, are charged to Bell Company shareholders, through the vehicle of price-cap regulation. Worse still, all Bell Company prices must be deflated according to a "productivity offset" concocted by the FCC, and pegged at a level that is unrealistically high. Regulation alone may thus transform any well-engineered, efficiently-priced, new broadband service into a source of steadily growing loss in subsequent years.

Under unbundling and interconnection regulations promulgated by the FCC, neither competitors nor incumbents will deploy such technology to reach any but the largest and most profitable business users. Competitors have little incentive to deploy the technology themselves, and the FCC has directed that they may lease successful new technologies from incumbent local carriers at FCC-determined cost, with no risk of losing on unsuccessful investments. Facilities-based competition by new entrants, and new investment by incumbents, will occur only when interconnection prices are properly aligned with underlying costs. Local phone companies will